

AWTP WaterLines

Alvarado Water Treatment Plant Construction Update

Spring 2004

Phase I is Complete

The City of San Diego Water Department is pleased to announce the first phase of upgrades and expansions are complete at the Alvarado Water Treatment Plant.

The \$52 million project increased plant capacity from 120 million gallons of water a day (mgd) to 150 mgd. In addition to increasing drinking water capacity, new equipment and technologies have been installed at Alvarado. These improvements will ensure Alvarado keeps pace with the latest federal and state drinking water regulations, guaranteeing continued safe drinking water for San Diego residents and visitors.

Phase I Completed Activities:

- Completed eight new filter and rapid-mix facilities
- Replaced existing Lake Murray and College Ranch pump stations
- Constructed a new emergency electrical generator
- Constructed a new wash-water tank and demolished an existing wash-water tank
- Remodeled and upgraded the plant operations building
- Constructed raw water and finished water chemical facilities for treatment and disinfection



The new state-of-the-art control room is part of the Alvarado Water Treatment Plant Upgrade and Expansion Phase I upgrade to the plant operations building.

The Water Department Capital Improvements Program is committed to creating a safe and reliable water treatment and distribution system with state-of-the-art facilities at the lowest possible cost to our customers.

Useful Phone Numbers

Project Information Line:	619-533-4679
Billing Information:	619-515-3500
Recycled Water Program:	619-515-3500
Drinking Water Questions:	619-668-3233
Water Pressure Problems:	619-527-7482
Report a Water Main Break:	619-515-3525
Lakes Recreation Program:	619-465-3474
Speakers Bureau:	619-533-6638
Group Jobs Information:	858-573-5081
Storm Water Pollution Prevention:	619-235-1000
Water Theft Code Enforcement:	619-533-4151
EPA Drinking Water Information:	800-426-4791

Earl Thomas Reservoir Facts and Figures

- Inside diameter – 406'
- Water depth – 38'
- 2,280 deliveries of 20,600 cubic yards of concrete – enough concrete to cover a football field, 16 feet thick
- 58 reels of prestressing strand – 242 miles long if placed end to end – about the distance from San Diego to Santa Barbara



Water Conservation Facts

- Per capita water usage in San Diego has gone from 201 gallons per day (gpd) in 1989 to 166 gpd in 2002
 - A 17.4% drop in use
 - At the same time, the City's population increased by 10%
- San Diego's Water Conservation Program accounted for 18,452 acre feet per year (AFY) of water saved; that's 16.5 million gallons of water savings per day
- The goal of the City of San Diego Water Department is to achieve 26,000 acre feet (AF) of savings per year by 2005
- San Diego invested \$3.2 million on Water Conservation efforts in 2003
 - \$5.5 million total when including matching funds from non-City sources

Earl Thomas Reservoir is the Largest in the Country

The construction of the new Earl Thomas drinking water Reservoir is well underway. With the demolition and excavation completed on September 19, 2003, work on the new structure began on August 21, 2003. To maximize efficiencies, we simultaneously worked on the final grading on one section of the reservoir while pouring the foundation, floor and walls on a different section. When completed in the summer of 2005 the new reservoir will hold 35 million gallons of water. The new circular pre-stressed concrete reservoir will be the largest of its kind in the country.

The new Earl Thomas Reservoir will be connected to the two existing 21 million-gallon reservoirs located on the western side of the water treatment plant via a 900 foot long tunnel currently under construction. The Earl Thomas Reservoir will also be connected to the new filters which were constructed as part of Phase I.



New trench for 72" pipe.



Demolition and excavation of the old Earl Thomas Reservoir.



Contractors prepare the floor panels for another concrete pour.



Help Keep Our Beaches Clean

Storm drains are not connected to the wastewater treatment system. Sandbags, fences and other measures are in place near this construction site to prevent sediment and pollutants from entering the City's storm water conveyance system. Removing or altering these materials is illegal in accordance with the City of San Diego's Municipal Code 142.0146 (b). Find out more about protecting our beaches, bays and watersheds at www.thinkbluesd.org.



The Alvarado Water Treatment Plant Upgrade and Expansion Project is part of the Water Department's Capital Improvements Program to increase capacity and reliability to meet current and future water needs. These improvements will ensure our water will meet all current and future drinking water standards and provide maximum protection of public health.